Firmato digitalmente da:
Roberto Cereda
Data: 01/08/2025 12:51:12

pietro.galbussera@lge.com

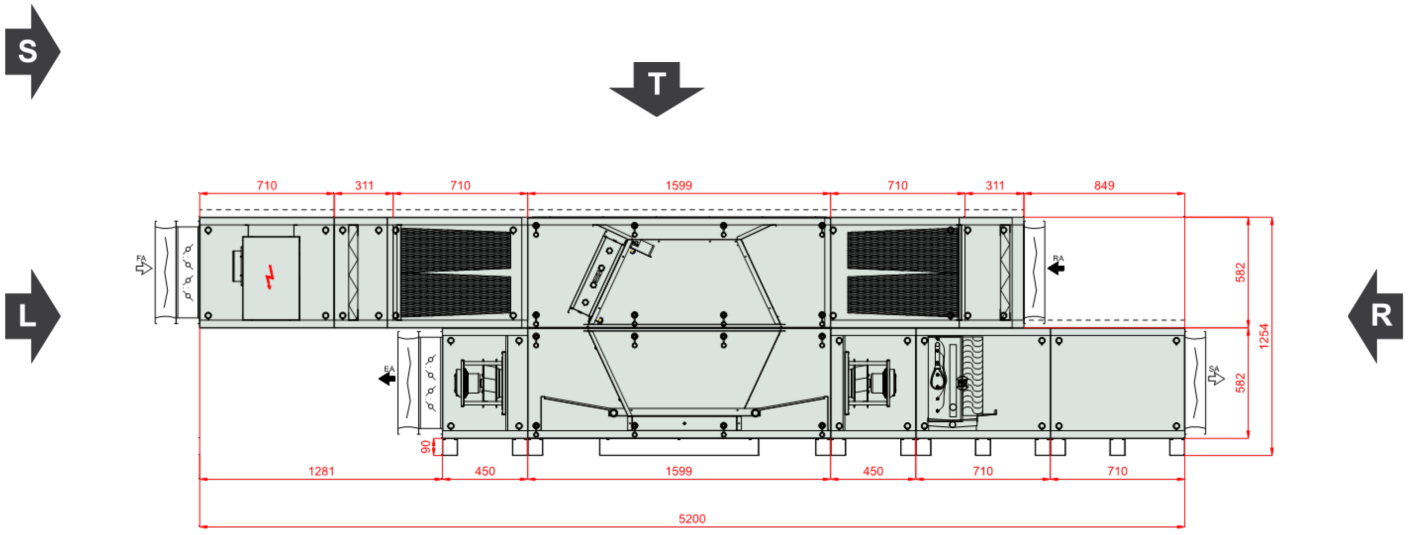
Technical data for item 3

Offer number 2/LIVE.EUR/PG/2025

Project name DATA CENTER
MIL05B /1LG.0003.0005.000
3/

Type	RecoveryHexVerticalCompact
Application	Outdoor
Project Tag	UTA WC ADMIN
Size	E-AVGV030C
Set	E-AVGV030C-R-HFFPVCE/E-AVGV030C-L-FFPV
Insulation thickness	40 mm
Insulation	Insulation_Value_MW40
Weight of the set (+/- 10%)*	800 Kg
Supply airflow 2	1793.00 m³/h
External pressure	171 Pa
Exhaust airflow 2	1757.00 m³/h
External pressure	198 Pa
SFP Winter	1.14 kW/m³/s
SFP Summer	1.14 kW/m³/s
EEC Winter	E 2016
EEC Summer	C 2020
EECS Reference Region	Roma Leonardo Da Vinci

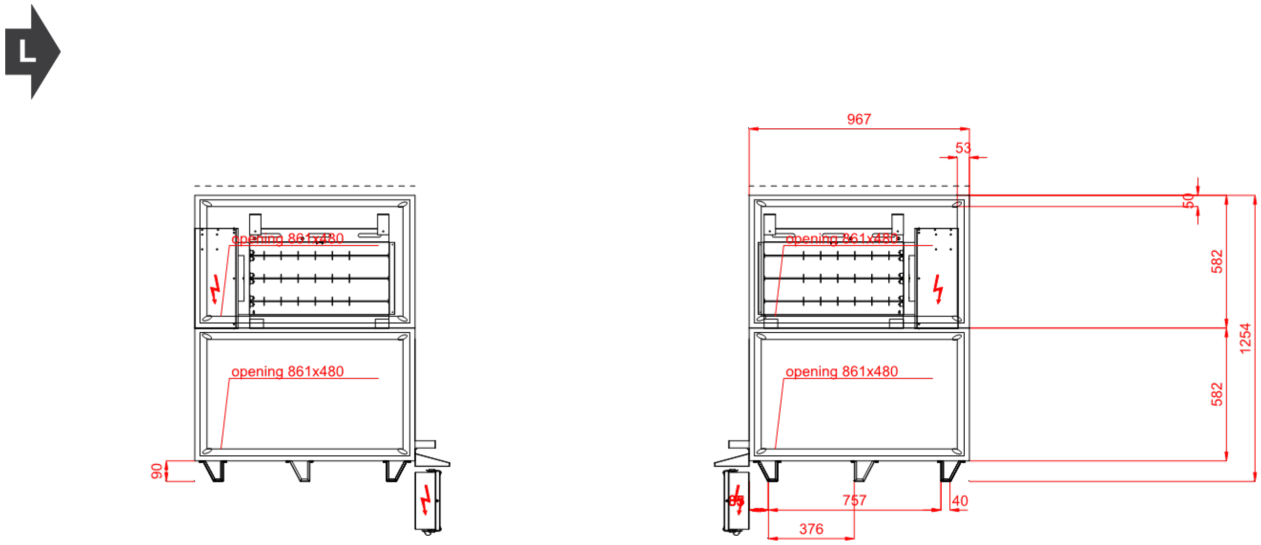
Inspection Panels



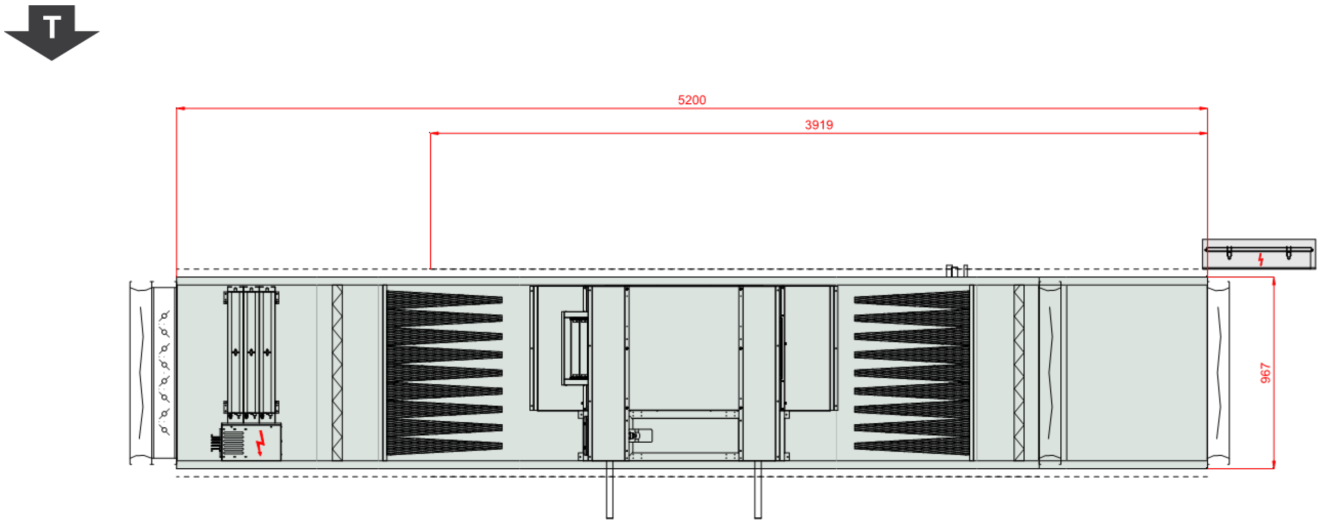
pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Front View (left)



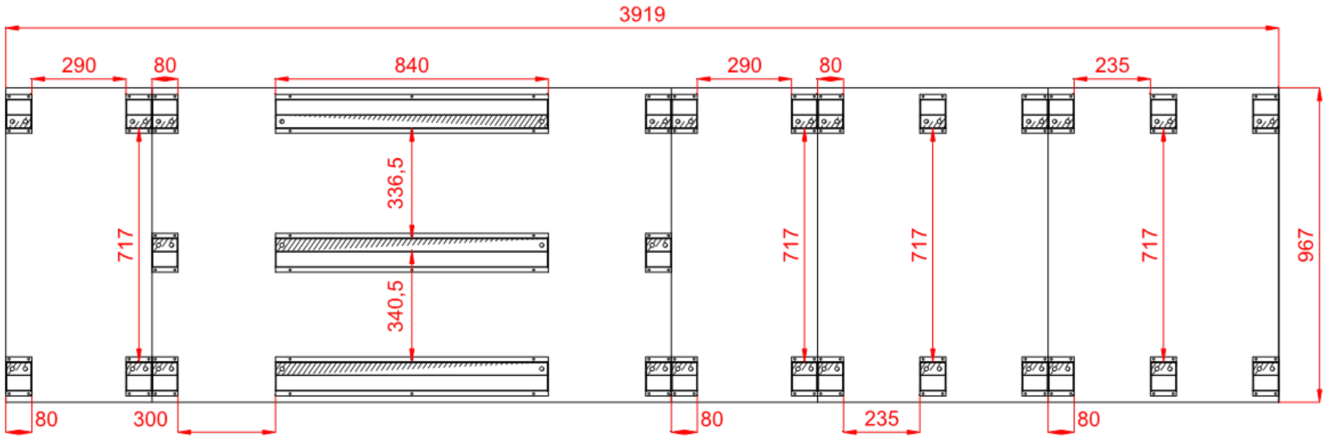
Top View



pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Frame Top View, within the AHU outline contour



Sizes

Device casing dimensions	5200x967x1254 mm
Internal Cross Section Area	0.4453 m²
Internal Cross Section Area (Integrated Section)	0.4453 m²

Unit design

Sandwich type casing made of 40mm thick mineral wool. Insulation covered with sheet metal on both sides. (Optional: electric heaters and silencers can be supplied as duct functions without insulation).

Unit Power Supply 400V/3ph/50Hz.

Casing anti-corrosion protection: Aluzinc AZ 150. Corrosion resistance (salt spary test): over 2400 hours

In case of a unit with heat recovery system with controls, the section of AHU with recovery system is fully wired, with pre-configured controller. In case of a unit without recovery system, a unit is to be field wired and the control system is delivered (if ordered) in packages for assembly and connection on site by installation contractor.

The device is equipped with EC motors.

Temperature Conditions

Reference atmospheric pressure 101325 Pa **Winter outdoor reference temperature -4.0 °C**

	External air			Return air		
	DBT	X	DA	DBT	X	DA
Summer	33.7 °C	13.456 g/kg	1.2000 kg/m³	20.0 °C	11.000 g/kg	1.2000 kg/m³
Winter	-4.0 °C	1.976 g/kg	1.2000 kg/m³	22.0 °C	6.000 g/kg	1.2000 kg/m³

Ref. Weather Station:: Roma Leonardo Da Vinci

	External air	
	DBT	X
Summer	31.8 °C	13.456 g/kg
Winter	0.9 °C	1.976 g/kg

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Supply

Electric heater in casing

Type E-AVGV030C-2,00kW-400/3/50-RES **Version** N3_400_3_50_FullControls_RES_YES

Rated Electric Power	6.00 kW		
Intake air DBT / X	-4.0 °C / 1.976 g/kg	Discharge air DBT / X	5.1 °C / 1.976 g/kg
Air Velocity	1.12 m/s	Air Press. Drop Wet	5 Pa
Air Volume Flow	1793.00 m³/h		
Heating capacity	5.5 kW		

Panel Filter

Type M5/50.EU5MPleat.Int.Sld

ePM10 40% - ISO 16890 - EFF CLASS E — Flat Mini-Pleat Filter[26.0]

Filter Energy Performance Class	E		
Winter operation		**Summer operation**	
Air Pressure Drop	85 Pa	Air Pressure Drop	85 Pa
Pressure Drop - Clean Filter	19 Pa	Pressure Drop - Clean Filter	19 Pa
Pressure Drop at 100% Dirty Filters	150 Pa	Pressure Drop at 100% Dirty Filters	150 Pa
Air Velocity	1.12 m/s	Air Velocity	1.12 m/s
Fiter Section - Cross Section Area	0.4452 m²		
Filter Sizes			
P.FLT M5 440x493x48 (1-2-0301-0202)	2,000 x Pcs		

Air Filter Sizes Additional Info

Note: Filter is not Eurovent certified.

Long Bag Filter

Type F7/600.Bag.Int.Sld

ePM2,5 65% (ISO16890) - EFF CLASS E — Bag[9.0]/600

Filter Energy Performance Class	E		
Winter operation		**Summer operation**	
Air Pressure Drop	111 Pa	Air Pressure Drop	111 Pa
Pressure Drop - Clean Filter	22 Pa	Pressure Drop - Clean Filter	22 Pa
Pressure Drop at 100% Dirty Filters	200 Pa	Pressure Drop at 100% Dirty Filters	200 Pa
Air Velocity	1.12 m/s	Air Velocity	1.12 m/s
Fiter Section - Cross Section Area	0.4452 m²		
Filter Sizes			
B.FLT F7 428x428x600 (1-2-0304-1015)	2,000 x Pcs		

Air Filter Sizes Additional Info

Note: Filter is not Eurovent certified.

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Counter-Flow Recuperator (Hexagonal)

Type E-AVGV030C Hex

HIPS 2.0 (SR)

Winter operation		**Summer operation**	
Supply		**Supply**	
Intake air DBT / X	5.1 °C / 1.976 g/kg	Intake air DBT / X	33.7 °C / 13.456 g/kg
Discharge air DBT / X	19.6 °C / 1.979 g/kg	Discharge air DBT / X	22.5 °C / 13.458 g/kg
Air Velocity	1.43 m/s	Air Velocity	1.43 m/s
Air Press. Drop Wet / Dry	102 Pa / 108 Pa	Air Press. Drop Wet / Dry	112 Pa / 108 Pa
Air Pressure	101325 Pa	Air Pressure	101325 Pa
Air Density	1.2000 kg/m³	Air Density	1.2000 kg/m³
Air Volume Flow	1793.00 m³/h	Air Volume Flow	1793.00 m³/h
Recovery capacity Total	8.5 kW	Recovery capacity Total	-6.9 kW
		Efficiency Real Flow	85 %
Winter operation		**Summer operation**	
Exhaust		**Exhaust**	
Intake air DBT / X	22.0 °C / 6.000 g/kg	Intake air DBT / X	20.0 °C / 11.000 g/kg
Discharge air DBT / X	7.8 °C / 5.999 g/kg	Discharge air DBT / X	32.0 °C / 11.000 g/kg
Air Velocity	1.40 m/s	Air Velocity	1.40 m/s
Air Press. Drop Wet / Dry	105 Pa / 104 Pa	Air Press. Drop Wet / Dry	104 Pa / 104 Pa
Air Pressure	101325 Pa	Air Pressure	101325 Pa
Air Density	1.2000 kg/m³	Air Density	1.2000 kg/m³
Air Volume Flow	1757.00 m³/h	Air Volume Flow	1757.00 m³/h
Recovery Bypass	Yes		
Air Damper	Yes		

Counter-Flow (Hex)

Max Internal Leakage 0.25%

FAN SECTION

Fan Section PLUG_DD_225_0,74_1.33_EC|IE4

EC_IE4_F_IMB14_71_1.33p_T 771.3.570-2 225|0.74kW|1.33x2

Qty in section x 2

Fan Set Designed for wet operating conditions

The Fan System EffectIs Taken Into Account In The Fan Performances

Fan PLUG_VS_225_AF_Px 2

Fan Static Pressure	525 Pa	Impeller efficiency: Static / Total	70 %/73 %
Dynamic pressure	19 Pa	Fan Energy Index (FEI)	4,7004
External Pressure	171 Pa	Shaft power	0.19 kW x 2
Total Pressure	543 Pa	Fan Working Revolutions	2914 1/min
Winter operation		**Summer operation**	
Air Volume Flow	1793.00 m³/h	Air Volume Flow	1793.00 m³/h

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Motor EC_IE4_F_71_IMB14_1.33p_0.74_50x 2

771.3.570-2	EC	50Hz	
		Motor Rated Revolutions	4500 1/min
Operational Voltage	230 V/1 ph	Motor Rated Power	0.74 kW x 2
El. Motor Rated Voltage	230 V/1 ph/50 Hz		

EC Motor Controller

EC Controller Settings	32 Hz		
EC Motor Drive Connecting Board	YES		
Motor Drive FLA (Full-Load Amperes)	5.8 A	Motor Drive MCA (Min. Circuit Ampacity)	7.2 A
Motor Drive MCB (Max. Circuit Breaker)	10.0 A		

FAN SECTION ADDITIONAL INFO

FAN SECTION OPTIONAL EQUIPPMENT

Connecting Point	CP Provided by others

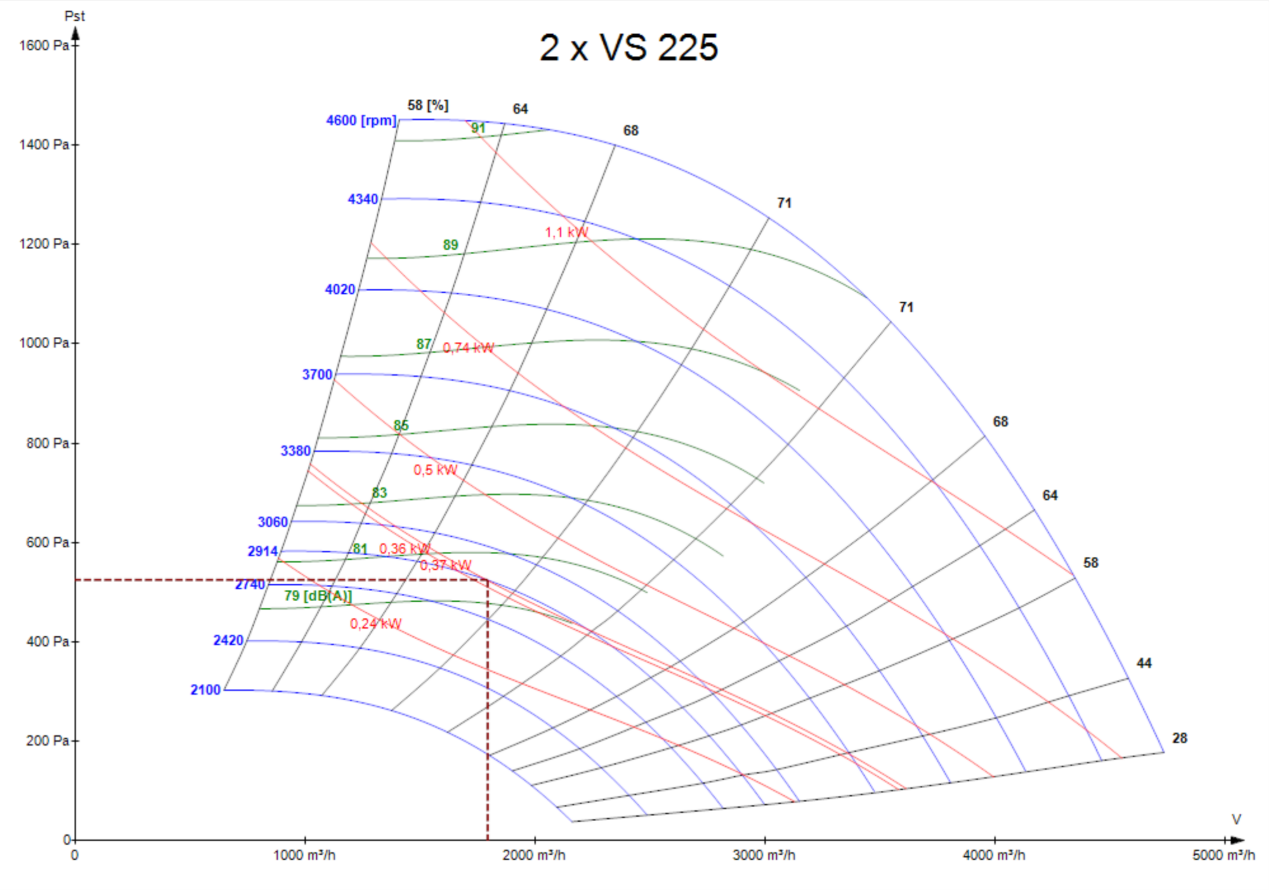
FAN SECTION CONSUMED POWER

Winter operation		**Summer operation**	
Absorbed Power	0.43 kW	Absorbed Power	0.43 kW
EPC for clean filters	0.30 kW	EPC for clean filters	0.30 kW
SFP for clean filters	0.60 kW/m³/s	SFP for clean filters	0.60 kW/m³/s

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** 2/LIVE.EUR/PG/2025

FAN PERFORMANCE GRAPH



Dual Temperature DX Coil w/ Droplet Eliminator

Type DXH VVS030c 4R-1 TD SH.Cu.St.Std	**Number of rows** 4	**Sections** 1	**Connection Supply/Return:** 5/8"/Ø28

2,67 [dm^3]	VVS030c 4 1

Medium	R410A	Maximum working pressure	38 bar
Intake air DBT / X	22.5 °C / 13.458 g/kg	Discharge air DBT / X	12.6 °C / 8.951 g/kg
Air Velocity	1.67 m/s	Air Press. Drop Wet / Dry	45 Pa / 21 Pa
Air Pressure	101325 Pa	Air Density	1.2000 kg/m³
Air Volume Flow	1793.00 m³/h		
Cooling capacity: Sensible / Total	6.1 kW/12.9 kW	Evaporation temperature	6.0 °C
Medium flow rate	0.21900 m³/h	Medium pressure drop	8.68 kPa

Heating mode

2,67 [dm^3]	VVS030c 4 1

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** 2/LIVE.EUR/PG/2025

Medium	R410A	Maximum working pressure	38 bar
Intake air DBT / X	19.6 °C / 1.979 g/kg	Discharge air DBT / X	36.6 °C / 1.967 g/kg
Air Velocity	1.65 m/s	Air Press. Drop Wet	29 Pa
Air Pressure	101325 Pa	Air Density	1.2000 kg/m³
Air Volume Flow	1793.00 m³/h		
Heating capacity	10.3 kW	Condensation temperature	45.0 °C
Medium flow rate	0.22146 m³/h	Medium pressure drop	5.23 kPa
Vapor overheating	6.0 °C	Liquid sub-cooling	4.0 °C
Liquid Velocity	0.20 m/s	Gas Velocity	1.57 m/s

Empty section

Type EMP.SEC E-AVGV030C Medium

Winter operation		**Summer operation**	
Air velocity	1.12 m/s	Air velocity	1.12 m/s

Resp_EmptySection_Info_Name

EmptySections

Acoustic data

Acoustic power level [dB]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lw [dB]
Inlet	[dB]	66.3	64.1	55.7	45.8	40.9	42.6	42.1	68.6
Outlet	[dB]	62.1	67.9	67.5	63.6	55.7	40.4	34.9	72.0
Environment	[dB]	51.1	54.9	47.5	38.6	29.7	22.4	10.9	57.0

Acoustic pressure level at 1 meter distance [dB]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lp [dB]
	[dB]	40.1	43.9	36.5	27.6	18.7	11.4	2.0	46.0

Internal Pressure Drop

	Summer operation	Winter operation
Internal Pressure Drop	**355 Pa**	**355 Pa**
Air Inlet	0 Pa	0 Pa
Electric Heater	5 Pa	5 Pa
Air Filter (short)	85 Pa	85 Pa
Air Filter (long)	111 Pa	111 Pa
PHE	108 Pa	108 Pa
Fan section	0 Pa	0 Pa
DX Cooler	45 Pa	45 Pa
Empty Section	1 Pa	1 Pa
Air Outlet	0 Pa	0 Pa

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Exhaust airflow 3

Panel Filter

Type M5/50.EU5MPleat.Int.Sld

ePM10 40% - ISO 16890 - EFF CLASS E	Flat Mini-Pleat Filter[26.0]

Filter Energy Performance Class	E

Winter operation		**Summer operation**	
Air Pressure Drop	84 Pa	Air Pressure Drop	84 Pa
Pressure Drop - Clean Filter	19 Pa	Pressure Drop - Clean Filter	19 Pa
Pressure Drop at 100% Dirty Filters	150 Pa	Pressure Drop at 100% Dirty Filters	150 Pa
Air Velocity	1.10 m/s	Air Velocity	1.10 m/s
Fiter Section - Cross Section Area	0.4452 m²		

Filter Sizes

P.FLT M5 440x493x48 (1-2-0301-0202)	2,000 x Pcs

Air Filter Sizes Additional Info

Note: Filter is not Eurovent certified.

Long Bag Filter

Type F7/600.Bag.Int.Sld

ePM2,5 65% (ISO16890) - EFF CLASS E	Bag[9.0]/600

Filter Energy Performance Class	E

Winter operation		**Summer operation**	
Air Pressure Drop	110 Pa	Air Pressure Drop	110 Pa
Pressure Drop - Clean Filter	21 Pa	Pressure Drop - Clean Filter	21 Pa
Pressure Drop at 100% Dirty Filters	200 Pa	Pressure Drop at 100% Dirty Filters	200 Pa
Air Velocity	1.10 m/s	Air Velocity	1.10 m/s
Fiter Section - Cross Section Area	0.4452 m²		

Filter Sizes

B.FLT F7 428x428x600 (1-2-0304-1015)	2,000 x Pcs

Air Filter Sizes Additional Info

Note: Filter is not Eurovent certified.

FAN SECTION

Fan Section PLUG_DD_225_0,74_1.33_EC|IE4

EC_IE4_F_IMB14_71_1.33p_T	771.3.570-2	225|0.74kW|1.33x2	
		Qty in section	x 2

Fan Set Designed for wet operating conditions

The Fan System EffectIs Taken Into Account In The Fan Performances

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

Fan PLUG_VS_225_AF_Px 2

Fan Static Pressure	497 Pa	Impeller efficiency: Static / Total	71 %/73 %
Dynamic pressure	18 Pa	Fan Energy Index (FEI)	5,2080
External Pressure	198 Pa	Shaft power	0.17 kW x 2
Total Pressure	515 Pa	Fan Working Revolutions	2842 1/min
Winter operation		**Summer operation**	
Air Volume Flow	1757.00 m³/h	Air Volume Flow	1757.00 m³/h

Motor EC_IE4_F_71_IMB14_1.33p_0.74_50x 2

771.3.570-2	EC	50Hz	
		Motor Rated Revolutions	4500 1/min
Operational Voltage	230 V/1 ph	Motor Rated Power	0.74 kW x 2
El. Motor Rated Voltage	230 V/1 ph/50 Hz		

EC Motor Controller

EC Controller Settings	32 Hz		
EC Motor Drive Connecting Board	YES		
Motor Drive FLA (Full-Load Amperes)	5.8 A	Motor Drive MCA (Min. Circuit Ampacity)	7.2 A
Motor Drive MCB (Max. Circuit Breaker)	10.0 A		

FAN SECTION ADDITIONAL INFO

FAN SECTION OPTIONAL EQUIPPMENT

Connecting Point	CP Provided by others

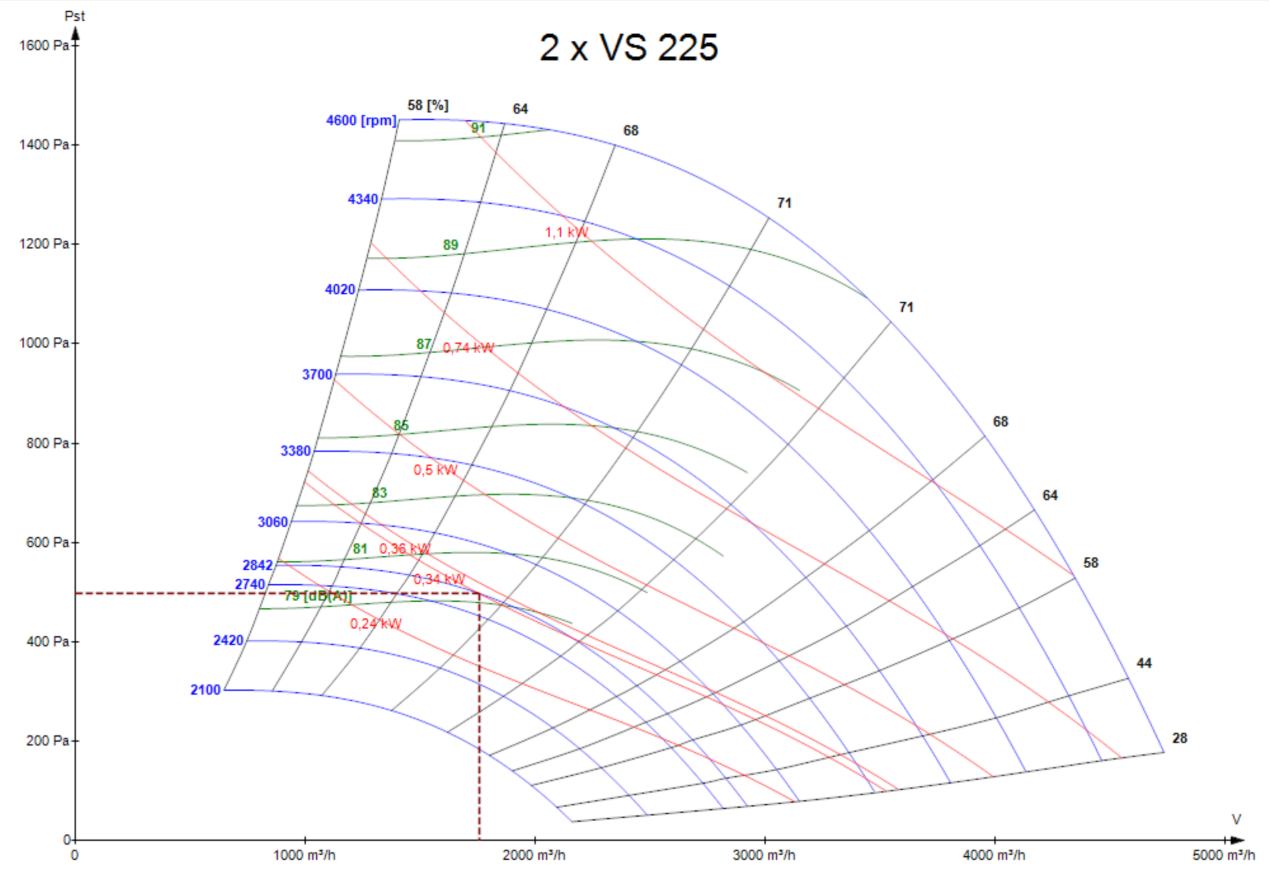
FAN SECTION CONSUMED POWER

Winter operation		**Summer operation**	
Absorbed Power	0.40 kW	Absorbed Power	0.40 kW
EPC for clean filters	0.27 kW	EPC for clean filters	0.27 kW
SFP for clean filters	0.55 kW/m³/s	SFP for clean filters	0.55 kW/m³/s

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** 2/LIVE.EUR/PG/2025

FAN PERFORMANCE GRAPH



Acoustic data

Acoustic power level [dB]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lw [dB]
Inlet	[dB]	66.7	64.6	56.1	47.3	42.4	46.1	45.5	69.1
Outlet	[dB]	65.5	71.4	71.9	69.1	66.2	61.9	58.3	76.8
Environment	[dB]	50.5	54.4	46.9	38.1	29.2	21.9	10.3	56.5

Acoustic pressure level at 1 meter distance [dB]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lp [dB]
	[dB]	39.5	43.4	35.9	27.1	18.2	10.9	2.0	45.5

Internal Pressure Drop

	Summer operation	Winter operation
Internal Pressure Drop	**298 Pa**	**298 Pa**
Air Inlet	0 Pa	0 Pa
Air Filter (short)	84 Pa	84 Pa
Air Filter (long)	110 Pa	110 Pa
PHE	104 Pa	104 Pa
Fan section	0 Pa	0 Pa
Air Outlet	0 Pa	0 Pa

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

AHU Opening Sizes & Unit Accessories	Supply	Exhaust

Controls Selection Mode: Functional set

AHU Opening Sizes	Supply	Exhaust
Air Inlet	Front 861x480	Front 861x480
Air Outlet	Front 861x480	Front 861x480
AirDamper	**Supply**	**Exhaust**
Air Inlet	Provided	Not Provided
Air Outlet	Not Provided	Provided
Flexible Connection	**Supply**	**Exhaust**
Air Inlet	Provided	Provided
Air Outlet	Provided	Provided

Other Accessories

Roof	Roof	1 Accessories Quantity
Air Filter Indicator	AIR.FLTR.IND_1	4 Accessories Quantity
	Casing Support Columns	2 Accessories Quantity

Control application

Functional Code	AP|0|0|2|3|0|0|0|6|3|0|0|0|0|0|1
APP Code	uPC3
Main Temp. Sensor	Duct Supply

Human Machine Interface		**Options**	
		Differential Pressure Transducer	CAV
HMI Basic (User)	Yes		
Control Box	Yes		
Control Box location	Back side	Resp_Controls_SafetySwitch_Name	Yes

Air damper actuators

Controls	Code	Set
Air Damper Actuator ON-OFF 10Nm	ADMP.ACT.SET ON-OFF 10Nm	2
Air Damper Actuator 0-10 2Nm	ADMP.ACT.SET 0-10 2Nm	1
Air Damper Actuator 0-10 10Nm	ADMP.ACT.SET 0-10 10Nm	1

Temperature sensor

Controls	Code	Set
Outdoor temperature sensor NTC 10k	Temp. Sensor NTC10k (Outdoor)	3
Duct temperature sensor NTC 10k	Temp. Sensor NTC10k (Duct)	2

Transducers and Switches

Controls	Code	Set
Differential Pressure Transducer CAV	PRSS.TRDC_CAV	1

Remarks

NOTES ON CONTROLS:

• Control system included.

• The unit is factory wired (power and controls) according to the product standard.

- Control system is based on uPC3 controller.
- The controller without GSM communication.

AHU Connection Box

AHU Connection Box

Rated Power	2.96 kW	Full Load Amps	19.0 A
Power Connection	380V-415V 3N~ (3P+N+E)	Power Cord	5 x 2,50 mm²

Electric Heaters Connection

1 LP

Heaters		**Controls**	
Rated Power	6.00 kW		
Power Connection	400V+PE	Power Connection	230V+N+PE
Full Load Amps	8.7 A	Full Load Amps	0.2 A
MCA	10.9 A	Power Cord	3 x 0,75 mm²
Circuit Breaker	16.0 A		
Power Cord	4 x 2,50 mm²		

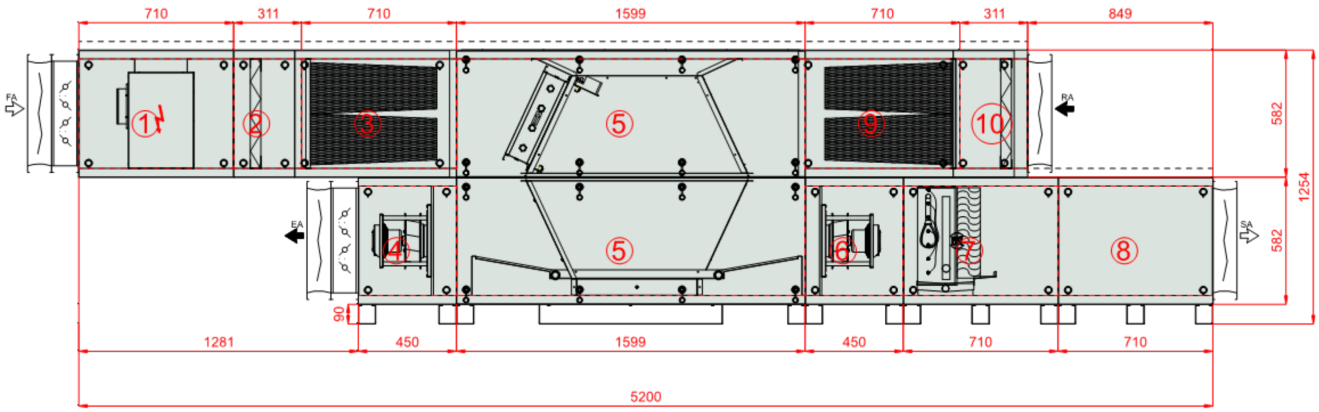
Section splits

Transport Sections	Mass [Kg]	LENGTH [mm]	WIDTH [mm]	HEIGHT [mm]
1 (H)	59	710	967	582
2 (F)	21	311	967	582
3 (F)	42	710	967	582
4 (V)	50	450	967	672
5 (P_P)	212	1599	967	1254
6 (V)	37	450	967	672
7 (C)	63	710	967	672
8 (E)	41	710	967	672
9 (F)	42	710	967	582
10 (F)	25	311	967	582

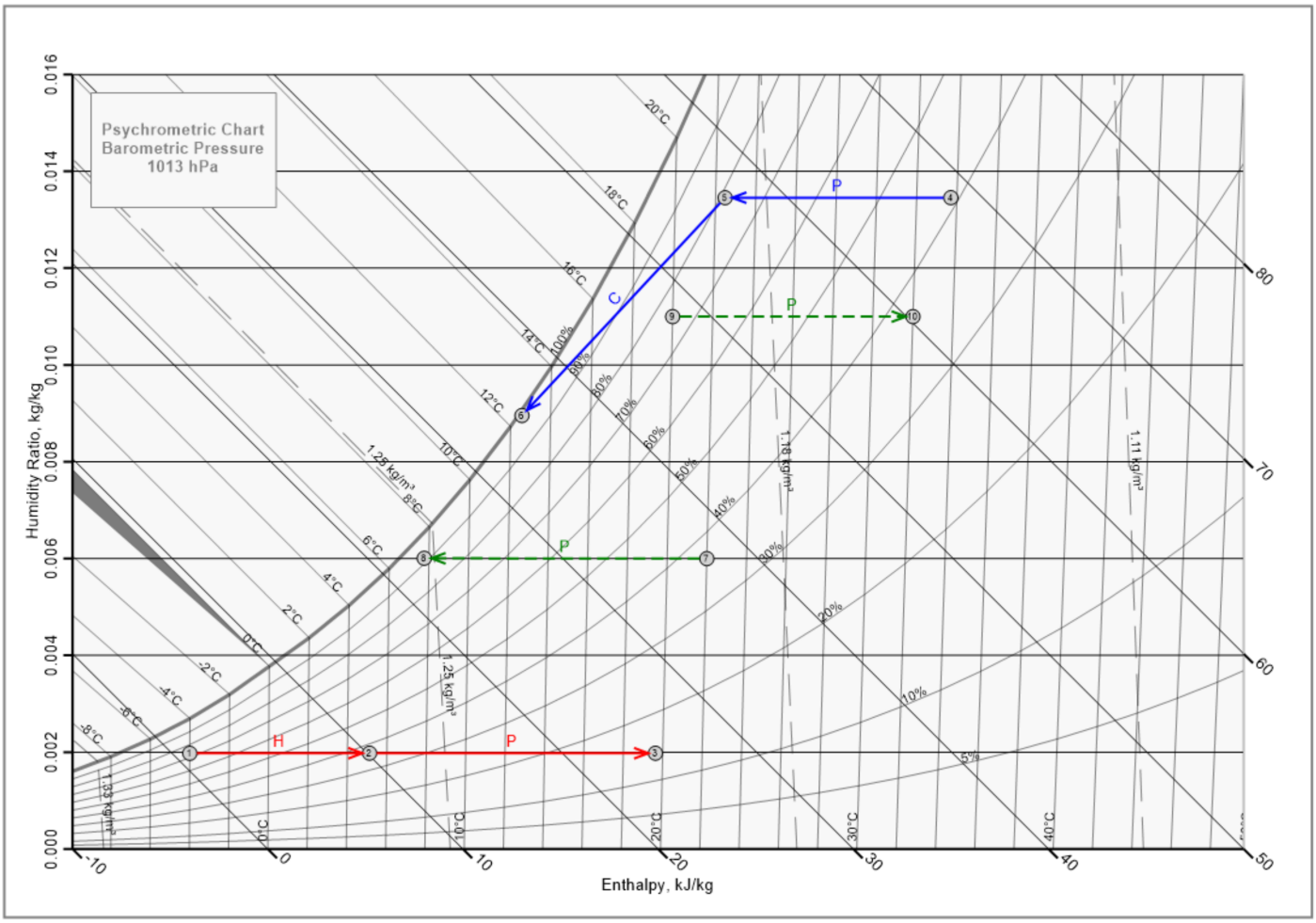
Transport Sections Dims

pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**



pietro.galbussera@lge.com

Technical data for item 3 **Offer number** **2/LIVE.EUR/PG/2025**

HxDiagram_Header